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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/825,391	04/03/2001	James A. Pope	OKL00001	1613

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WORLDCOM, INC.
TECHNOLOGY LAW DEPARTMENT
1133 19TH STREET NW
WASHINGTON, DC 20036

EXAMINER

SING, SIMON P

ART UNIT	PAPER NUMBER
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2645

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DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/825,391

Applicant(s)

POPE ET AL.

Examiner

Simon Sing

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- ☐ Interview Summary (PTO-413) Paper No(s). ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-4, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schesser et al. US 6,414,405.

1.1 Regarding claims 1 and 7, Schesser et al. discloses a transoceanic cable 15 in figure 2. Cable 15 has four ends connecting to sites A and B in region 1 and sites C and D in region 2, to provide data traffic between these sites (column 1, lines 21-28). Schesser teaches that cable 15 may replace two traditional transoceanic cables (column 4, lines 10-33), but admits that when cable 15 is broken, communications between two regions are lost (column 4, lines 57-64). Schesser further teaches a three-cable system to provide reliability in case one cable is broken (column 1, lines 21-38).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Schesser's reference based on his teaching of reliability, so that a first and second cable, each with two ends, would have been added to the cable 15 (third cable) for connecting sites A and C, and sites B and D

respectively, wherein the first and second cables would have had the bandwidth of individual cables 1 and 2 (or 7 and 8) of cable 15 for providing back-up to cable 15. The motivation of this a modification was to provide reliable communications paths between two regions in case cable 15 was broken or severed.

1.2 Regarding claim 2, cable 15 connects sites A and C via individual cables 1 and 2, and sites B and D via individual cables 7 and 8 (figure 2).

1.3 Regarding claim 3, cable 15 is comprises two cables (individual cables 1-4 and 5-8) of equal capability (figure 2).

1.4 Regarding claim 4, Schesser teaches switching between land sites (column 4, lines 21-24).

1.5 Regarding claim 8, as discussed in claim 7, the first cable, connecting sites A and C, has two ends; the second cable, connecting sites B and D, also has two ends; and cable 15 (third cable) has four ends.

2. Claims 5, 6, 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schesser et al. US 6,414,405 in view of Johnson US 5,903,370.

2.1 Regarding claims 5 and 6, Schesser reaches using a three-cable system to provide reliable communications between two regions, but fails to teach to classifying data traffic into different priorities.

However, Johnson discloses an optical communications system with spare cables (figure 9). Johnson teaches that data traffic is classified in to higher priority and lower priority (column 6, lines 61-67), and when one of the cables is broken, lower priority data is dropped in favor of the higher priority data (column 9, lines 24-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Schesser's reference with the teaching of Johnson, so that data traffic would have been classified into higher and lower priorities, and when cable 15 was broken, the higher priority data traffic would have been transmitted first through an alternating cable, because such a modification would have enabled the system to identify priority data, and to transmitted the higher priority data first, in case data traffic was more than the alternating cable could handle.

2.2 Regarding claims 9 and 11-13, Schesser et al. discloses a transoceanic cable 15 in figure 2. Cable 15 has four ends connecting to land sites A and B in region 1 and land sites C and D in region 2, and provides data traffic between these sites (column 1, lines 21-28). Schesser teaches that cable 15 may replace two traditional transoceanic cables (column 4, lines 10-33), but admits that when cable 15 is broken, communications between two regions are lost (column 4, lines 57-64). Schesser further teaches a three-cable system to provide reliability in case one cable is broken

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(column 1, lines 21-38) and switching (multiplexing) between the land sites (column 4, lines 21-24).

Schesser fails to teach classifying data traffic into different priorities.

However, Johnson discloses an optical communications system with spare cables (figure 9). Johnson teaches that data traffic is classified in to higher priority and lower priority (column 6, lines 61-67), and when one of the cables is broken, lower priority data is dropped in favor of the higher priority data (column 9, lines 24-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Schesser's reference base on Shesswer's teaching on reliability and the teaching of Johnson, so that a first and second cable, each with two ends and a bandwidth capability of individual cables 1 and 2 (or 7 and 8) of cable 15, would have been added to the cable 15 (third cable) for connecting sites A and C, and sites B and D respectively to provide back-up for cable 15, and data traffic would have been classified into higher and lower priorities, since each land site having multiplexing capability, then when cable 15 was broken, the higher priority data traffic would have been transmitted first through the first cable and the second cable as alternating routes, because such a modification would have enabled the system to identify priority data, and to transmitted the higher priority data first, in case cable 15 was broken and the data traffic was more than an alternating cable could handle.

2.3 Regarding claim 10, the Schesser's reference, modified by Johnson, teaches preempting lower priority data for higher priority data as discussed in claim 9.

Conclusion

3. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Simon Sing whose telephone number is (703) 305-3221. The examiner can normally be reached on Monday - Friday from 8:30 AM to 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang, can be reached at (703) 305-4895. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.



S.S.

02/20/2004

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